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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,390	10/10/2001	Kenneth S. Kramer	2640/1G822-US1	1277

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03/08/2005

Alphonso A. Collins
Darby & Darby, P.C.
805 Third Avenue
New York, NY 10022

EXAMINER

NGUYEN, VI X

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

501

Office Action Summary	Application No.		Applicant(s)	
	09/975,390		KRAMER ET AL.	
	Examiner		Art Unit	
	Victor X Nguyen		3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 21-25 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 26-27 and 29-32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-20 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12, lines 6-7, it is unclear from the specification and drawings in figures 8-9 how the hand piece phase difference between the voltage and current **is less than a predetermined value**. Further, applicant fails to disclose any criticality of the exact value of the voltage and current of the handpiece. Furthermore, it is unclear how the drive frequency is greater than a pre-set frequency and a number of impedance measurements are **greater than a pre-defined number** and **if the result of the determining step is positive** and how it relates to the method for determining temperature of a transducer of an ultrasonic hand piece.

Claim 28 is rejected as being incompleting because it depends from a withdraw claim. Therefore, it has not been further analyzed on the merit.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sherman et al (5,735,280). Sherman et al disclose, in figs. 2, 10-11, a method for control the temperature of a transducer of an ultrasonic device, including: a transducer (24), where determining the temperature of the transducer based on the capacitance of the transducer (see col. 15, lines 62-67, col. 16, lines 1-40), and where providing a warning to a user of the handpiece (18) if the temperature of the transducer and a rate of change of the temperature is excessive (see col. 3, lines 56-67 and col. 4, lines 1-35), where the capacitances are measured at several different frequencies (see figs. 8-9 and col. 14, lines 5-65).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sherman et al (5,735,280).

As to claim 6 the device as shown in figs. 2, 10-11 can be used to determined temperature of a transducer of an ultrasonic hand piece substantially as recited. Note that the predefined frequency range could be from 34 kHz to 44 kHz. Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a range as claimed for this device is only a design choice and a minor modification of Sherman device would provide a frequency range as recited in the claim.

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Claim 11 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Sherman et al in view of Benndorf et al (4,689,515).

Sherman et al teach all limitations substantially as claimed except the capacitance frequency is stored in memory. Benndorf et al teach the capacitance frequency is stored in memory (figs. 1-2, see col.1, lines 29-44, col. 2, lines 34-67 and col. 3, lines 1-11) in order to determine proper transducer temperature within the handpiece. It would have been obvious to one having ordinary skill in the art at the time the invention to modify Sherman et al by adding the capacitance frequency is stored in memory in order to determine proper transducer temperature within the handpiece.

Allowable Subject Matter

4. Claims 26-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record, alone or in combination, discloses all of the limitations of claim 26 including, discarding a maximum and a minimum calculated shunt capacitance value to obtain a residual group of shunt capacitances, and where averaging the residual group of shunt capacitances to obtain a final shunt capacitance value of the hand piece.

Response to Arguments

5. Applicant's arguments filed 12/15/2004 have been fully considered but they are not persuasive. Applicant argues that Sherman does not suggest, "calculating the temperature of the transducer based on the shunt capacitance of the transducer". This argument is not well founded. As explained above, the Sherman method does suggest where determining the temperature of the

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transducer based on the capacitance of the transducer (see col. 15, lines 45-51), and where providing a warning to a user of the handpiece (18) if the temperature of the transducer and a rate of change of the temperature is excessive (see col. 4, lines 14-35), therefore claim 1 of the invention is not defined over the Sherman reference.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor X Nguyen whose telephone number is (571) 272-4699. The examiner can normally be reached on M-F (8-4.30 P.M).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Victor X Nguyen
Examiner
Art Unit 3731

Vn *Vn*
3/3/2005



JULIAN W. WOO
PRIMARY EXAMINER